



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,949	11/15/2001	Nobuyuki Takamori	70801-56702	5456
21874	7590	05/25/2004		
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER ANGEBRANNDT, MARTIN J	
			ART UNIT	PAPER NUMBER

1756

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/002,949	Applicant(s) TAKAMORI ET AL.	
	Examiner Martin J Angebranndt	Art Unit 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1756

1. The response provided by the applicant has been read and given careful consideration. Responses to the arguments of the applicant are presented after the first rejection to which they are directed. Rejections of the previous office action, not found below are withdrawn based upon the amendments to the claims. Tajima et al. JP 2000-311381 is withdrawn as the linear expansion modulus values are outside the range recited in the claim. Should the applicant change the value to embrace the 7.2×10^{-5} , this reference would be applied in another rejection.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The applicant points to figures a and b, which are attachments to the response and not part of the specification as originally filed, for a basis for " 7.8×10^{-5} " and " 4.65×10^{-4} ". This is entirely improper. The applicant may find a basis in some of the points of figure 7 for this or similar values, but this is not the placed relied upon by the applicant and the record is not clear as to the actual values of these points. Therefore, the added language is considered unsupported by the specification as originally filed and new matter. Any new matter must be removed in any subsequent response.

Art Unit: 1756

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Murakami et al. '272.

Murakami et al. '272 teach optical recording media with substrates between 0.5 and 1.2 mm (28/63-65). The example disclosed in column 8 uses a polyurethane-acrylate UV curable resin with a thickness of 5 microns as the overcoating. (8/15-49). The tilt should be less than 10 mrad (21/1).

The applicant argues that the Murakami et al. reference does not describe the protective layer properties recited in the claims, nor the control of tilt due to humidity. The examiner notes that humidity is not the issue with the THERMAL linear expansion coefficient of the instant claims. The examiner is adopting the position that the THERMAL linear expansion coefficient is a property inherent to the material and notes that the applicant describes on page 11, urethane,

epoxy, polyester and polyether acrylates as useful and meeting the material limitations for the protective layer. ([0047] in the prepub). The applicant argues as if the inherent property needed to be specifically set forth in the reference applied. This is not the case if the property is reasonably to be inherent. The examiner notes that the THERMAL linear expansion coefficient is a property inherent to a material, based upon its composition and notes that the polyurethane-acrylate UV curable resin is one of those mentioned by the applicant as useful. Therefore the examiner asserts that the property is inherent and the claim anticipated.

7. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Inuoue et al. '493.

A CD with a resin substrate and a reflective metal film is coated with various UV curable optical recording media. The protective coatings in examples 1-121- through 2-3 use urethane acrylates. Tilt/warp is bad.

Urethane, epoxy, polyester and polyether acrylates are disclosed as useful and meeting the material limitation of the claims in the instant specification on page 11 at lines 1-6.

The rejection stands for the reasons provided above as no further arguments were directed at this rejection beyond those addressed above.

8. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Ohta et al. '884.

An optical recording medium with a resin substrate and a magneto-optical recording film is coated with a UV cured urethane-acrylate. (3/50-64)

Urethane, epoxy, polyester and polyether acrylates are disclosed as useful and meeting the material limitation of the claims in the instant specification on page 11 at lines 1-6.

The rejection stands for the reasons provided above as no further arguments were directed at this rejection beyond those addressed above.

9. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Yokoyama '222.

An optical recording medium with a resin substrate and a magneto-optical recording film is coated with a UV cured urethane-acrylate (example 1), and epoxy-acrylate (example 2).

Urethane, epoxy, polyester and polyether acrylates are disclosed as useful and meeting the material limitation of the claims in the instant specification on page 11 at lines 1-6.

The rejection stands for the reasons provided above as no further arguments were directed at this rejection beyond those addressed above.

10. Claims 10-16 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Yoshioka et al. '649.

An optical recording medium with a resin substrate and a phase change optical recording film is coated with a UV cured urethane-acrylate. (example 1)

Urethane, epoxy, polyester and polyether acrylates are disclosed as useful and meeting the material limitation of the claims in the instant specification on page 11 at lines 1-6.

The rejection stands for the reasons provided above as no further arguments were directed at this rejection beyond those addressed above.

11. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Tachibana et al. '709.

An optical recording medium with a resin substrate and a magneto-optical recording film is coated with a UV cured urethane-acrylate. (examples 6 and 7) The warp is less than 10

microns over the diameter of the disk (table 1(col. 13/14)). The use of substrate which are 0.3-5 mm thick and made of polycarbonate or polyolefins is disclosed. (7/27-32)

Urethane, epoxy, polyester and polyether acrylates are disclosed as useful and meeting the material limitation of the claims in the instant specification on page 11 at lines 1-6.

The rejection stands for the reasons provided above as no further arguments were directed at this rejection beyond those addressed above.

12. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al. '272 or Tachibana et al. '709.

It would have been obvious to use other substrate thicknesses disclosed as useful in these references, such as 0.5 mm in place of those used in the examples with a reasonable expectation of achieving useful optical recording medium.

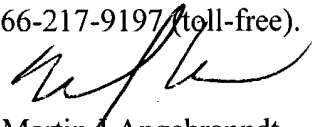
13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Martin J Angebrannndt
Primary Examiner
Art Unit 1756

05/19/2004